

**2019-20 NC Check-In 2**  
**Grade 8 Mathematics**  
**State Item Statistics**

	Content Standard		Item #	Depth of Knowledge	Percent Correct by Item
<b>Expressions and Equations</b>	<b>8.EE.8</b>	Analyze and solve a system of two linear equations in two variables in slope-intercept form. <ul style="list-style-type: none"> <li>Understand that solutions to a system of two linear equations correspond to the points of intersection of their graphs because the point of intersection satisfies both equations simultaneously.</li> <li>Solve real-world and mathematical problems leading to systems of linear equations by graphing the equations. Solve simple cases by inspection.</li> </ul>	12^	Skill/Concept	27.3
			14^	Skill/Concept	55.7
			16^	Skill/Concept	35.4
			18^	Recall	49.9
			20^	Recall	38.2
			24^	Skill/Concept	33.4
<b>Functions</b>	<b>8.F.1</b>	Understand that a function is a rule that assigns to each input exactly one output. <ul style="list-style-type: none"> <li>Recognize functions when graphed as the set of ordered pairs consisting of an input and exactly one corresponding output.</li> <li>Recognize functions given a table of values or a set of ordered pairs.</li> </ul>	3	Recall	21.7
			4	Skill/Concept	63.8
			13^	Recall	36.3
			19^	Skill/Concept	50.7
			23^	Skill/Concept	59.7
			25^	Skill/Concept	46.6
	<b>8.F.3</b>	Identify linear functions from tables, equations, and graphs.	1	Recall	36.2
			2	Recall	52.6
			5	Skill/Concept	48.9
			15^	Skill/Concept	54.1
			21^	Recall	36.1
			22^	Recall	62.9
	<b>8.F.4</b>	Analyze functions that model linear relationships. <ul style="list-style-type: none"> <li>Understand that a linear relationship can be generalized by <math>y = mx + b</math>.</li> <li>Write an equation in slope-intercept form to model a linear relationship by determining the rate of change and the initial value, given at least two <math>(x, y)</math> values or a graph.</li> <li>Construct a graph of a linear relationship given an equation in slope-intercept form.</li> <li>Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of the slope and <math>y</math>-intercept of its graph or a table of values.</li> </ul>	6*	Recall	29.0
			7*	Skill/Concept	43.8
			8*	Skill/Concept	30.9
			9*^	Skill/Concept	20.4
			10*^	Recall	21.7
			11*^	Skill/Concept	14.6
			17^	Recall	42.5

\* Items marked with an asterisk (\*) are gridded response items.

^ Students had access to a calculator when completing items marked with a ^.

Note: Results from NC Check-Ins should not be compared across interims, districts, or the state.

Each math Grade 8 NC Check-In assesses different content standards.